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Abstract

In networks carrying existing optical traffic on one wavelength band in combination with wavelength division multiplexed traffic carried on a second wavelength band, there is a need to enable processing of the two systems without subjecting the WDM channels to unacceptable losses. The invention meets the above need by the provision of a node in an optical communications network that has a first set of add/drop filter elements for extracting and combining optical signals carried on wavelength division multiplexed channels in a first wavelength band and an extraction element and combining element for dropping and adding, respectively, a service channel associated with the wavelength division multiplexed channels. The extraction element is arranged upstream of the add/drop filter elements relative to the direction of traffic flow and the combining element is arranged downstream of the add/drop filter elements. The extraction and combining elements are additionally adapted to drop and add, respectively, at least one further wavelength band carrying at least one optical traffic data channel.

Fig. 2